CLASSIFICATION CONFIDENTIAL

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

COUNTRY USSR (Estonia)

DATE DISTR. 25 Aug 1954

SUBJECT Description of Tartu - Petseri Railroad

NO. OF PAGES 3

25X1

NO. OF ENCLS. (LISTED BELOW)

25X1

SUPPLEMENT TO REPORT NO.

THIS IS UNEVALUATED INFORMATION

1. The 108 kilometer single-track railroad line from Tartu (58° 23' N 27° 43' E) to Petseri (57° 50' N 27° 37' E) was being planned as early as 1933. The original plan was to have a straight line route. After two years of conferences, in which villages and influential land owners attempted to have the line rerouted to come closer for ease of transportation, the present route was finally settled upon. Construction work started in 1935 and was completed in 1938. The first train travelled the line in 1936, using a temporary arrangement.

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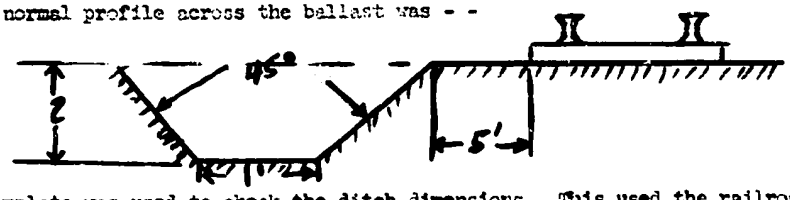
2. In the marshy areas, the ballast was prepared by setting off a dynamite charge about two feet below the surface of the ground and with about 15 ft of gravel on top of the ground. When the charge was exploded, the gravel settled into the cavity created. Occasionally, for extremely marshy areas, two dynamite charges, one beneath the other, were exploded simultaneously to make certain the gravel settled down to a firm foundation.

3. On fairly firm ground, two feet of granite gravel was spread for ballast. This granite stone was obtained from Estonia and was crushed to about two-inch diameter stones in many small factories in the area.

4. Where an area had to be filled, a mixture of gravel and sand was used, with a granite gravel cover.

5. The normal profile across the ballast was - -



A template was used to check the ditch dimensions. This used the railroad tracks as fixed points. Along the ditch a drain-off was provided at approximately 800 meter intervals.

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6. The ties used were obtained from a factory in Valga which produced ties for all of Estonia's railroads. The wood was coniferous. In the factory, the ties were cut to size and then piled in a pressure tank. The air was evacuated from the tank and liquid tar, by-product from asphalt production, was introduced under pressure. With this preperation, it was claimed the ties were good for 25 years. Before 1930, the year of production was burned into the tie. After 1930, a metal tag, stamped with the year of production and a symbol for the type of wood, was attached to the tie.

7. Nails were used to attach the rail and the bottom plate to the tie. I believe the bottom plates came from somewhere in Germany. The nails were manufactured by the Franz Krull factory in Tallinn and reputedly were good for 25 years. The rails were 12 to 13 meters long and came from the USSR [redacted] The rails were referred to as "No. 22" or "No. 2A".

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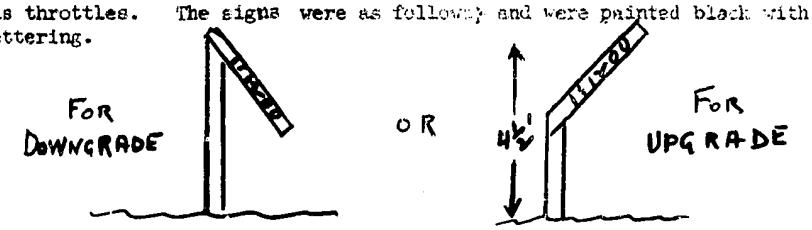
8. The maximum grade along this railroad line was 1 to 120. At five or six places between Tartu and Petseri this grade was marked for the train engineer to adjust his throttles. The signs were as follows and were painted black with white lettering.



9. In 1939, two 180-ton Czar locomotives of 1889 vintage, with no cars, were run on the line for a speed test. The average speed achieved was 110 kilometers per hour. The average speed for freight trains was about 50 kilometers per hour and and for passenger trains it was 85 kilometers per hour.

10. The Estonian Railroad Administration assigned six new oil burning steam locomotives to the line in 1939. Passenger cars and freight cars were not assigned to the line but were shuttled throughout Estonia. The normal traffic in 1939 was four express trains in each direction daily and two "post trains" which stopped at each station in each direction daily. The express trains usually had three or four third class cars, one second class car, one baggage car, one mail car, and one French dining car. The "post trains" usually had three or four passenger cars and eight or nine freight cars.

11. The inspection system on the Tartu-Petseri railroad line was typical for most of Estonia. The Railroad Administration constructed a three-room house and a barn, painted red with white trim, at two kilometer intervals along the track. The employee was then responsible for the track for one kilometer of track on each side from his house. He inspected each point of the track four times daily, walking a total of eight kilometers. He carried only a hammer to pound loose nails. For other maintenance, he telephoned the station at Rebase, Põlva or Veriora to get a seven man light maintenance crew, or to Tartu-Petseri to get a heavy maintenance crew. The light maintenance crews travelled on four-wheel cars with light equipment such as plates, ties, shovels and picks. The heavy maintenance crews travelled on a Swedish Diesel fuel crane car which could replace rails. A stock of five or ten spare railroad tracks was maintained at each inspector's house, suspended from racks, to keep the rails out of the snow and ice.

12. During the 1939-1940 Soviet occupation, no damage was done to this railroad system. Prior to the Nazi attack, the Red Army ran the three hundred Estonian locomotives and about 10 thousand Estonia passenger and freight cars off a cliff near Baltiski into the Baltic Sea. This rolling stock was damaged beyond repair. The Nazi Army brought in German rolling stock and moved one rail of the railroad lines to the narrower German size. In the fall of 1944, the Red Army bombed out many of the railroad bridges and thus captured most of the rolling stock intact.

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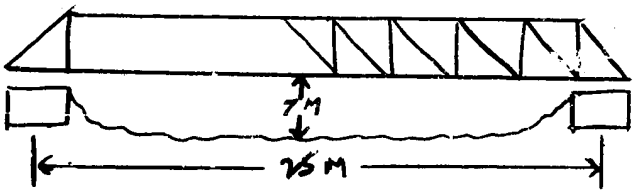
13. The bridge across the River near Petseri is about 25 meters long, of steel truss type construction on concrete beds, as follows:



The bridge at Reola is of similar construction but about 16 meters long. 25X1

14. There were about 25 other bridges along the line, each about three to five meters long. These bridges were no more than heavy steel German "I" beams laid across the river on concrete beds. 25X1

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